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PTO/SB/01 (12-97)

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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</b>	<b>Attorney Docket Number</b>	PSU 1813 (MIT 8231)
	<b>First Named Inventor</b>	Daniel R. Deaver
	<b>COMPLETE IF KNOWN</b>	
	<b>Application Number</b>	09 / 412,821
	<b>Filing Date</b>	October 5, 1999
	<b>Group Art Unit</b>	1615
<input type="checkbox"/> Declaration Submitted with Initial Filing	OR	<input checked="" type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)
<b>Examiner Name</b>		

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**COMPOSITIONS AND METHODS FOR ENHANCING RECEPTOR-MEDIATED CELLULAR INTERNALIZATION**

the specification of which  
☐ is attached hereto  
OR  
☒ was filed on (MM/DD/YYYY) 10/05/1999 as United States Application Number or PCT International Application Number 09/412.821 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)
60/103,117	October 5, 1998

☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PSU 1813 (MIT 8231)

9266/4

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## DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: ☐ Customer Number  OR ☒ Registered practitioner(s) name/registration number listed below

Place Customer  
Number Bar Code  
Label here

Name	Registration Number	Name	Registration Number
Patrea L. Pabst	31,284		
Robert A. Hodges	41,074		
Kevin W. King	42,737		

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☐ Customer Number  or Bar Code Label

OR ☒ Correspondence address below

Name	Patrea L. Pabst				
Address	Arnall Golden & Gregory, LLP				
Address	2800 One Atlantic Center, 1201 West Peachtree Street				
City	Atlanta	State	GA	ZIP	30309-3450
Country	United States	Telephone	(404)873-8794	Fax	(404)873-8795

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])		Family Name or Surname					
Daniel R.		Deaver					
Inventor's Signature	<i>Daniel R. Deaver</i>		Date 4/4/99				
Residence: City	Franklin	State	MA	Country	US	Citizenship	US
Post Office Address	4 Maple Brook Lane						
Post Office Address							
City	Franklin	State	MA	ZIP	02038	Country	US

☒ Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

Please type a plus sign (+) inside this box → +

PTO/SB/02A (3-97)

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<b>DECLARATION</b>	<b>ADDITIONAL INVENTOR(S)</b> <b>Supplemental Sheet</b> Page <u>1</u> of <u>1</u>
--------------------	---

<b>Name of Additional Joint Inventor, if any:</b>				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
David A.				Edwards			
Inventor's Signature						11/5/99 Date	
Residence: City	Boston	State	MA	Country	US	Citizenship	US
Post Office Address 452 Beacon Street, Unit 6							
Post Office Address							
City	Boston	State	MA	ZIP	02115	Country	US

<b>Name of Additional Joint Inventor, if any:</b>				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

<b>Name of Additional Joint Inventor, if any:</b>				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

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PSU 1813

9266/4

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicants:** Daniel R. Deaver and David A. Edwards

**Serial No:** 09/412,821                      **Group Art Unit:** 2165

**Batch No.:** H28

**Filed:** October 5, 1999                      **Examiner:** Azpuru, C.

**For:** COMPOSITIONS AND METHODS FOR ENHANCING  
RECEPTOR-MEDIATED CELLULAR INTERNALIZATION

**BOX ISSUE FEE**

Assistant Commissioner for Patents  
Washington, D. C. 20231

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST  
AND REVOCATION OF PRIOR POWERS**

**Sir:**

As owner of the entire interest of the above-identified patent application,  
as evidenced by the attached Statement Under 37 C.F.R. § 3.73(b), all powers of  
attorney previously given are hereby revoked and the following attorneys and  
agents are hereby appointed to prosecute and transact all business in the Patent  
and Trademark Office connected therewith:

Patrea L. Pabst  
Zhaoyang Li  
Rivka Monheit

Registration No. 31,284  
Registration No. 46,872  
Registration No. P-48,731

U.S.S.N.: 09/412,821  
Filed: October 5, 1999  
Power of Attorney by Assignee  
of Entire Interest and  
Revocation of Prior Powers

**Please send all correspondence relating to the above-identified patent application to:**

**Patrea L. Pabst  
HOLLAND & KNIGHT LLP  
Suite 2000, One Atlantic Center  
1201 West Peachtree Street, N.E.  
Atlanta, Georgia 30309-3400**

**(404) 817-8473 - Telephone  
(404) 817-8588 - Fax**

The undersigned signatory (whose title is supplied below) is empowered to act on behalf of the assignee identified below, and has reviewed all the documents in the chain of title of the patent application and, to the best of undersigned's knowledge and belief, title is in the assignee.

**THE PENN STATE  
RESEARCH FOUNDATION**

By: Ronald J. Huss

Name: Ronald J. Huss

Title: Director, Intellectual Property Office

Date: 7/6/01

ATL1 #468874 v1

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**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Daniel R. Deaver and David A. EdwardsApplication No./Patent No.: 09/412,821 Filed/Issue Date: October 5, 1999Entitled: COMPOSITIONS AND METHODS FOR ENHANCING RECEPTOR-MEDIATED  
CELLULAR INTERNALIZATIONThe Penn State Research Foundation, a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 010398, Frame 0611, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
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3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

7/6/01  
Date

Ronald J. Huss  
Typed or printed name  
Ronald J. Huss  
Signature  
Director, Intellectual Property Office  
Title

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UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

FEBRUARY 24, 2000

PTAS

ARNALL GOLDEN & GREGORY, LLP  
PATREA L. PABST, ESQ.  
2800 ATLANTIC CENTER  
1201 WEST PEACHTREE STREET  
ATLANTA, GA 30309-3450



\*101208440A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/22/1999

REEL/FRAME: 010398/0611  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
DEAVER, DANIEL R.

DOC DATE: 11/04/1999

ASSIGNOR:  
EDWARDS, DAVID A.

DOC DATE: 11/05/1999

ASSIGNEE:  
PENN STATE RESEARCH FOUNDATION,  
THE  
207 OLD MAIN  
UNIVERSITY PARK, PENNSYLVANIA 16802

SERIAL NUMBER: 09412821  
PATENT NUMBER:

FILING DATE: 10/05/1999  
ISSUE DATE:

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MAR 01 2000

PATENT DEPT.

DOCKETED FOR P31178/3  
BY JSH

010398/0611 PAGE 2

SHIRLIE SIMON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



11-30-1999

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**



101208440

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies)

**Submission Type**

- ☒ **New**
- ☐ **Resubmission (Non-Recordation)**  
Document ID#
- ☐ **Correction of PTO Error**  
Reel #  Frame #
- ☐ **Corrective Document**  
Reel #  Frame #

**Conveyance Type**

- ☒ **Assignment** ☐ **Security Agreement**
- ☐ **License** ☐ **Change of Name**
- ☐ **Merger** ☐ **Other**
- U.S. Government**  
(For Use ONLY by U.S. Government Agencies)
- ☐ **Departmental File** ☐ **Secret File**

**Conveying Party(ies)**

☐ Mark if additional names of conveying parties attached

Name	Execution Date Month Day Year
Name (line 1) <input type="text"/> Deaver, Daniel R.	<input type="text"/> 11041999
Name (line 2) <input type="text"/>	

**Second Party**

Name	Execution Date Month Day Year
Name (line 1) <input type="text"/> Edwards, David A.	<input type="text"/> 11051999
Name (line 2) <input type="text"/>	

**Receiving Party**

☐ Mark if additional names of receiving parties attached

Name	Address	City	State/Country	Zip Code
Name (line 1) <input type="text"/> The Penn State Research Foundation	Address (line 1) <input type="text"/> 207 Old Main	Address (line 2) <input type="text"/>	Address (line 3) <input type="text"/> University Park	<input type="text"/> Pennsylvania <input type="text"/> 16802
Name (line 2) <input type="text"/>				

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

Name	<input type="text"/>
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11/29/1999 DHGUYEN 00000217 09412821

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**Correspondent Name and Address**

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments.

#

**Application Number(s) or Patent Number(s)**

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

**Patent Number(s)**

<input type="text" value="09412821"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number  
only if a U.S. Application Number  
has not been assigned.

PCT  PCT  PCT   
PCT  PCT  PCT

**Number of Properties**

Enter the total number of properties involved.

#

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment:  
Deposit Account

Enclosed ☒ Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

#

Authorization to charge additional fees:

Yes ☒ No ☐

**Statement and Signature**

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.*

Patrea L. Pabst

Name of Person Signing

Reg. No.: 31,284

Signature

Date

11/18/99


## ASSIGNMENT

We, Daniel R. Deaver of 4 Maple Brook Lane, Franklin, Massachusetts 02038, and David A. Edwards of 452 Beacon Street, Unit 6, Boston, Massachusetts 02115, in consideration of ten dollars and other valuable consideration paid to us by The Penn State Research Foundation, a corporation of the State of Pennsylvania, having its principal place of business at 207 Old Main, University Park, Pennsylvania 16802, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said The Penn State Research Foundation, its successors and assigns, the entire interest for the United States of America, and its territories and all foreign countries and jurisdictions, including all rights of priority under the International Convention for the Protection of Industrial Property, in a certain invention or improvement in "*Compositions and Methods for Enhancing Receptor-Mediated Cellular Internalization*" described in U.S. Serial No. 09/412,821 filed in the United States Patent and Trademark Office on October 5, 1999, by Daniel R. Deaver and David A. Edwards, which claims priority to U.S. Provisional Application Serial No. 60/103,117 filed in the United States Patent and Trademark Office on October 5, 1998, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any provisional, divisional, continuation, continuation-in-part, reissue, or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns, but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and its territories and in all other foreign countries and jurisdictions to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation, and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

Title: "Compositions and Methods for Enhancing  
Receptor-Mediated Cellular Internalization"  
By: Daniel R. Deaver and David A. Edwards  
Filed: October 5, 1999  
ASSIGNMENT

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

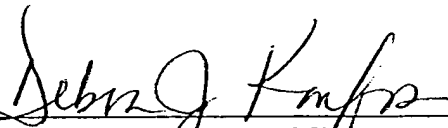
WITNESS my hand and seal this 4<sup>th</sup> day of November, 1999.

  
Daniel R. Deaver

State of Massachusetts )  
County of Middlesex )

Then personally appeared the above named Daniel R. Deaver and acknowledged the foregoing instrument to be his free act and deed, before me this 4<sup>th</sup> day of November, 1999.

Debra J. Koufos  
NOTARY PUBLIC  
My commission expires Mar. 12, 2004

  
Notary Public

My Commission expires: \_\_\_\_\_

Title: "Compositions and Methods for Enhancing  
Receptor-Mediated Cellular Internalization"  
By: Daniel R. Deaver and David A. Edwards  
Filed: October 5, 1999  
ASSIGNMENT

WITNESS my hand and seal this 5 day of November, 1999.



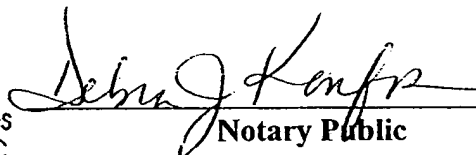
David A. Edwards

State of Massachusetts )

County of Middlesex )

Then personally appeared the above named David A. Edwards and acknowledged the foregoing instrument to be his free act and deed, before me this 5th day of November, 1999.

Debra J. Koufos  
NOTARY PUBLIC  
My commission expires Mar. 12, 2004

  
Notary Public

My Commission expires: \_\_\_\_\_